

THE AGA KHAN UNIVERSITY HOSPITAL CLINICAL LABORATORIES

UPDATE SWEAT CHLORIDE QUANTIFICATION

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INTRODUCTION:

Sweat chloride quantification is a confirmatory test for diagnosing cystic fibrosis (CF). CF is an autosomal recessive disease stemming from the mutation of the cystic fibrosis transmembrane conductance regulator (CFTR) gene which leads to impaired or absent chloride transport across epithelial cells. Impairment or absence of chloride transport leads to the production of thick, viscous mucus. Mucus retention leads to respiratory impairment, there may also be problems associated with the liver, pancreas, sweat glands, and vas deferens.

PRINCIPLE:

Sweat stimulation is performed by iontophoresis method and chloride measurements is performed using the principle of coulometric titration.

PATIENT PREPARATION:

- Patient needs to be well hydrated and should drink extra fluid on the day of test; infants should be fed within one hour of the appointment.
- The patient may take meals and all medications as per normal routine on the day of test.
- Patient should not use cream, oil, or lotions on arms (& legs in newborn) for 24 hours prior to the appointment.
- Patient should not have acute fever, diarrhea or vomiting on the day of test.
- If patient is ill on the day of the test, it is advised to get the next appointment after 2-3 days.
- Apparently weak or emaciated and dehydrated patients will be deferred.
- Patients on oxygen support or with recent history of prolonged hospital admission and antibiotics intake will be deferred.

SCHEDULE:

Test will be performed on

- Every Friday; only at AKUH Laboratory Soparivala Building Stadium Road Karachi.
- Timings 9:00 - 2:00 pm through appointment and results will be reported on the same day.

PLEASE FILE FOR QUICK REFERENCE

